

Work Order ID 79391

79391

Page 2

May-30-12 7:57:48 AM

Item ID: D350-748-241TRN

Accept

N900040100

Setup Start

NS1

Revision ID:

Item Name: Crosstube Turning Detail

Stop

NS2

Start Date: 1/25/12 Start Qty: 1.00 *1*

Cust Item ID:

Required Date: 1/27/12 Req'd Qty: 1.00 *1*

Customer:

Reference:

Approvals: Process Plan:

Date:

Tooling:

Date:

Run Start

NR1

QC:

Date:

SPC (Y/N):

Date:

Stop

NR2

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

120

120

Mori Seiki

Mori Seiki CNC Lathe Large

0.00

12-1-30

GNML

Memo

0.00

1-Turn second side as per Folio FA647
2- File transition lines smooth.
3-Scribe part # as per Dwg D350-748-241
FOLIO REV: _____
DWG REV: _____

130

130

QC

Quality Control

QC1- Inspect dimensions to dimension sheet

0.00

12-1-30

GNML

Memo

0.00

140

140

QC

Quality Control

QC8- Inspect parts - second check

0.00

Memo

0.00

12-2-9

Work Order ID 79391***79391***

Page 3

May-30-12 7:57:48 AM

Item ID: D350-748-241TRN

Accept

N900040100

Setup Start

NS1

Revision ID:

Item Name: Crosstube Turning Detail

Stop

NS2

Start Date: 1/25/12 Start Qty: 1.00

1

Cust Item ID:

Required Date: 1/27/12 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals: Process Plan:

Date:

Tooling:

Date:

Run Start

NR1

QC:

Date:

SPC (Y/N):

Date:

Stop

NR2Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

150

150

Crosstubes

Large Fab

0.00

MO

12-2-13

Crosstubes

Memo

0.00

160

160

Outsource1

Outsource process - Heat Treat

0.00

M
12-3-29

Outsource process - Heat Treat

Memo

0.00

Issue P/O: 16600

Heat Treat to min 180 KSI As per Dwg D350-748-241

Sand Blast tube after Heat Treat

Possible Supplier: Vac Aero

Ensure Certificate of Conformity is attached

170

170

Packaging

Receive & Inspect for Damage & Mat'l Certs

0.00

1/24/2011

Packaging

Memo

0.00

Ensure certificate of conformaty is attached

Dart Aerospace Ltd

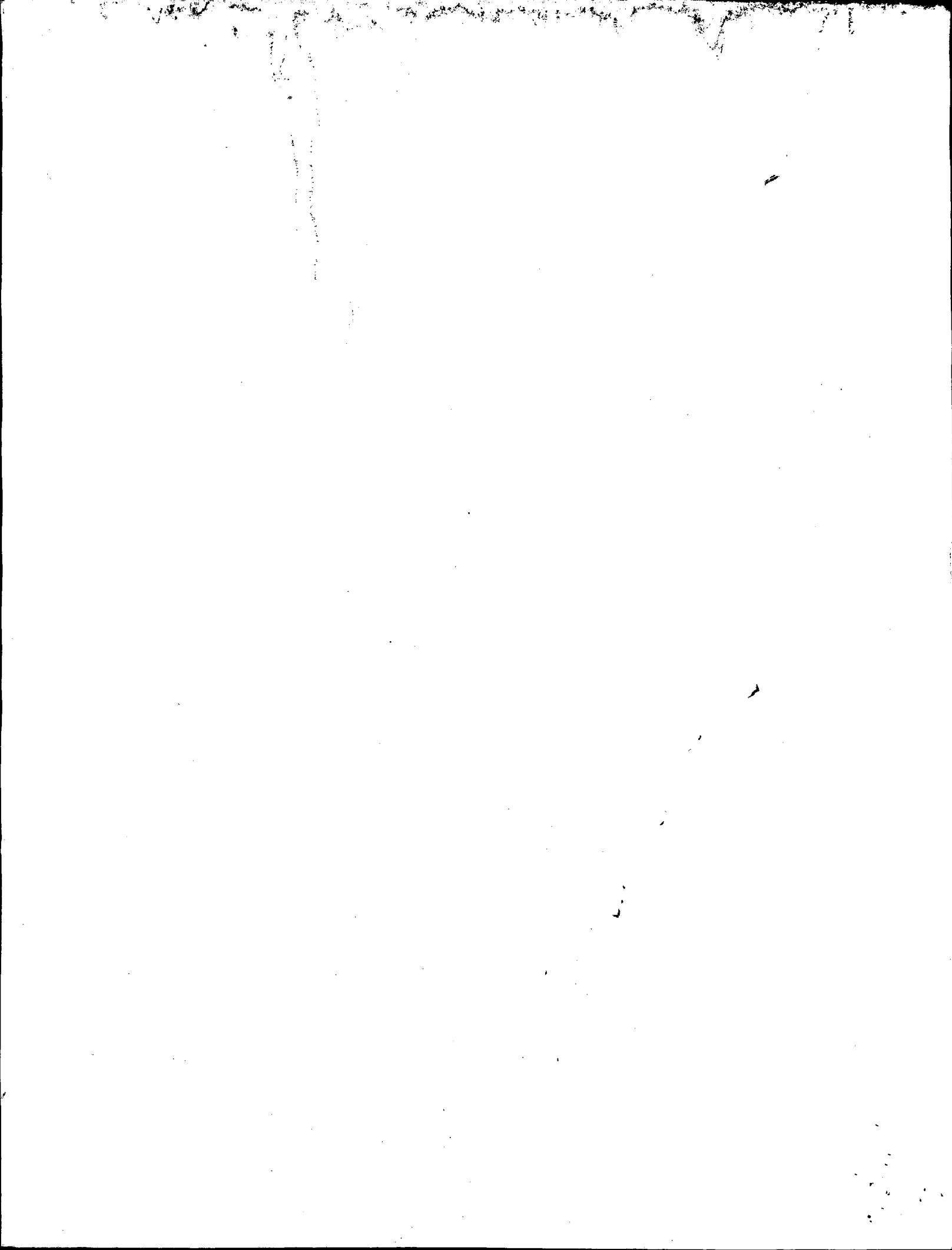
WIO: 19391		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	
12.03.26	151	DRILL Ø0.188 TUNING HOLE THRU CUFF, Qty(1) PER CUFF. DRILL 2" FROM END OF CUFF. HOLE IN BOTH CUFFS MUST BE PARALLEL TO EACH OTHER		MD 26 12.03.26 21.03		<i>J</i> 12.03.26 21.03		

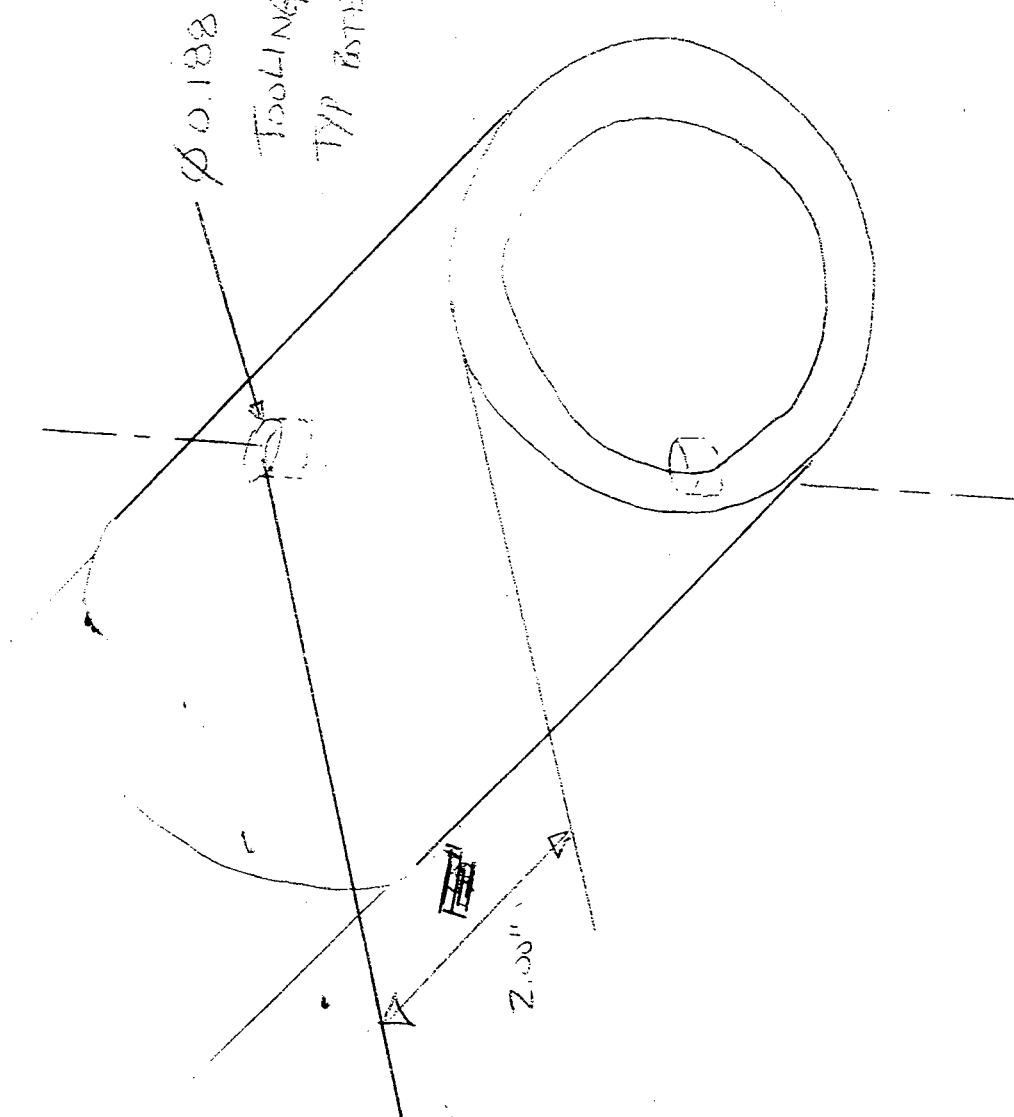
Part No: D350-748-241TRN PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

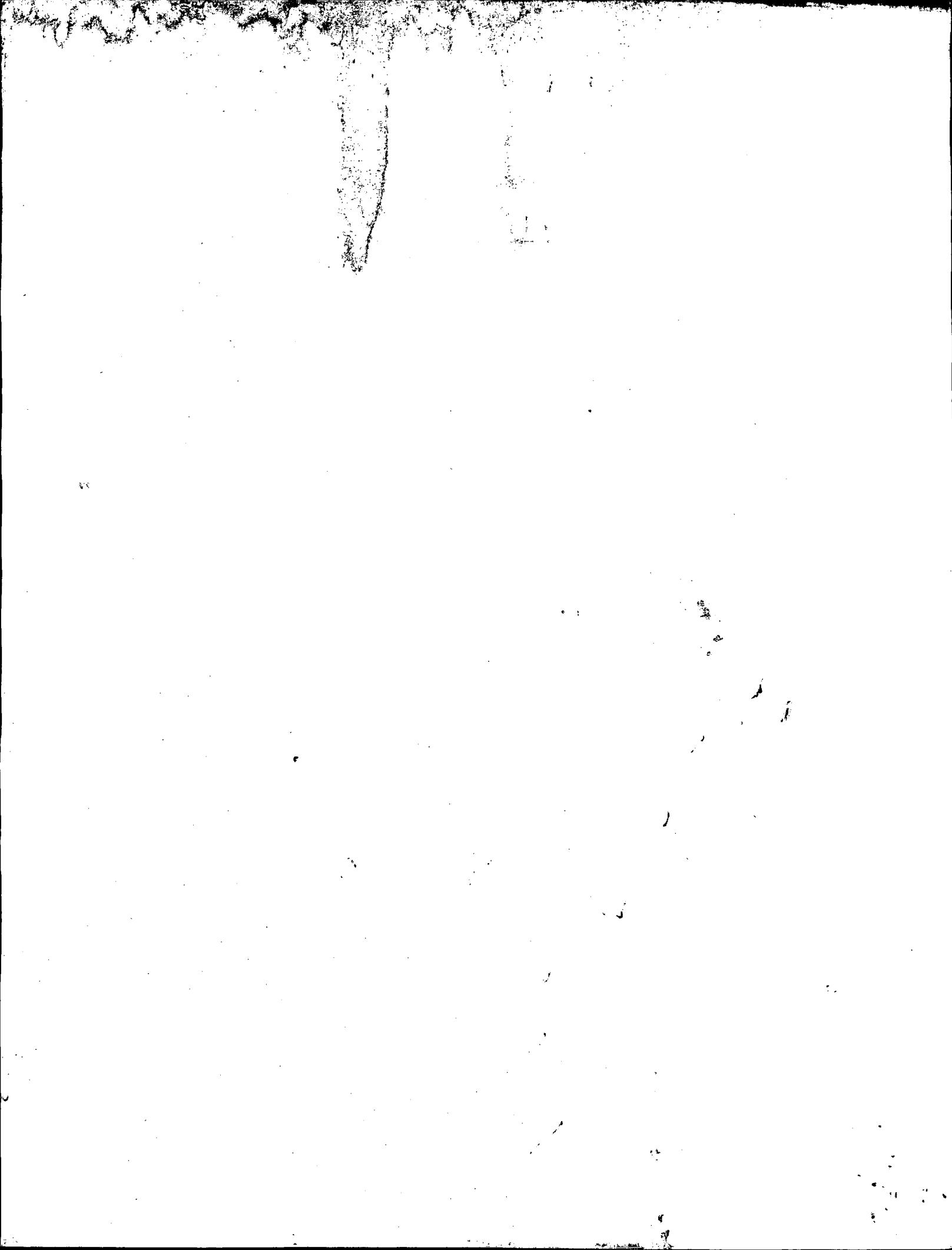
Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries







Work Order ID 79391

January-25-12 11:52:35 AM

79391

Page 4

Item ID: D350-748-241TRN

Accept

N900040100

Setup Start

NS1

Revision ID:

Item Name: Crosstube Turning Detail

Stop

NS2

Start Date: 25/01/2012 Start Qty: 1.00 *1*

Cust Item ID:

Required Date: 27/01/2012 Req'd Qty: 1.00 *1*

Customer:

Reference:

Approvals: Process Plan: _____

Date: _____

Tooling: _____

Date: _____

Run Start

NR1

QC: _____

Date: _____

SPC (Y/N): _____

Date: _____

Stop

NR2

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

180

QC6- Inspect dimensions to drawing

0.00 *8/20/2012*

*see late page
instruction sheet*

180

QC

Quality Control

190

190

Packaging

Packaging

0.00

PP 83698

12/6/2012

Packaging

Memo

0.00

Identify and stock in kanban rack

Location: _____

200

200

QC

Memo

0.00

QC21- Final Inspection - Work Order Release

0.00

12/6/2012

Quality Control

*MF
12-06-25*

W/O:		WORK ORDER CHANGES							
DATE	STEP	PROCEDURE CHANGE			By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)							
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector	
			Initial Chief Eng	Action Description Chief Eng	Sign & Date				

NOTE: Date & initial all entries

Picklist Print

May-30-12 7:57:48 AM

Page 1

Work Order ID: 79391

Parent Item: D350-748-241TRN

Parent Item Name: Crosstube Turning Detail

Start Date: 1/25/12

Required Date: 1/27/12

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP Rev:A New Issue 08-03-06 DD verified by:ec
IPP Rev B Removed polish 08.04.02 EC verified by : DD
IPP Rev C Removed LPS-3 08.06.23 Ec verified by: DD IPP Rev D 11.02.24 as per dwg
rev.F DD verf: JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D6015-125 Crosstube Material		Manufactured	No			120	Each	38.0000	1	1			

Location	Loc Qty	Loc Code
HALL	38	
	4	
61380		
72511	34	

(1)

12-1-26

mm.L

DART AEROSPACE LTD	Work Order:	79391
Description: Crosstube Assembly (AS350/355 High Aft)	Part Number:	D350-748-241
Inspection Dwg: D350-748-241 Rev: <i>07/01/2015</i>		Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

First Article Prototype

Inspection Sheet Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
SIDE A	2.240	+0.005/-0.000	2.245	/	vern	CNC-08
	2.180	+0.005/-0.000	2.184	/		
	2.180	+0.005/-0.000	2.184	/		
	2.208	+0.005/-0.000	2.212	/		
	2.234	+0.005/-0.000	2.237	/		
	2.253	+0.005/-0.000	2.257	/		
	2.272	+0.005/-0.000	2.277	/		
	2.299	+0.005/-0.000	2.304	/		
	0.063	+/-0.010	.063	/	vern	CNC-08
	4.26	+/-0.030	4.26	/	"	
	R0.063	+/-0.010	.063	/	RG	
	R0.50	+/-0.030	.500	/	"	
	2.240	+0.005/-0.000	2.241	/	vern	CNC-08
	2.180	+0.005/-0.000	2.183	/	"	
	2.180	+0.005/-0.000	2.182	/		
SIDE B	2.208	+0.005/-0.000	2.210	/		
	2.234	+0.005/-0.000	2.237	/		
	2.253	+0.005/-0.000	2.257	/		
	2.272	+0.005/-0.000	2.277	/		
	2.299	+0.005/-0.000	2.304	/		
	0.063	+/-0.010	.063	/	vern	CNC-08
	4.26	+/-0.030	4.26	/	"	
	R0.063	+/-0.010	.063	/	RG	
	R0.50	+/-0.030	.500	/	"	
	122.70	+/-0.060	122.70	/	topic	97M.L-02

Measured by:	<i>M.M.L.</i>	Audited by:	<i>J.P.</i>	Prototype Approval:	N/A
Date:	<i>12/01/26</i>	Date:	<i>12-29</i>	Date:	N/A

Rev	Date	Change	Revised by	Approved
A	07.01.17	New Issue	(P/O D350-748-201)	KJ/JLM

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART AEROSPACE LTD

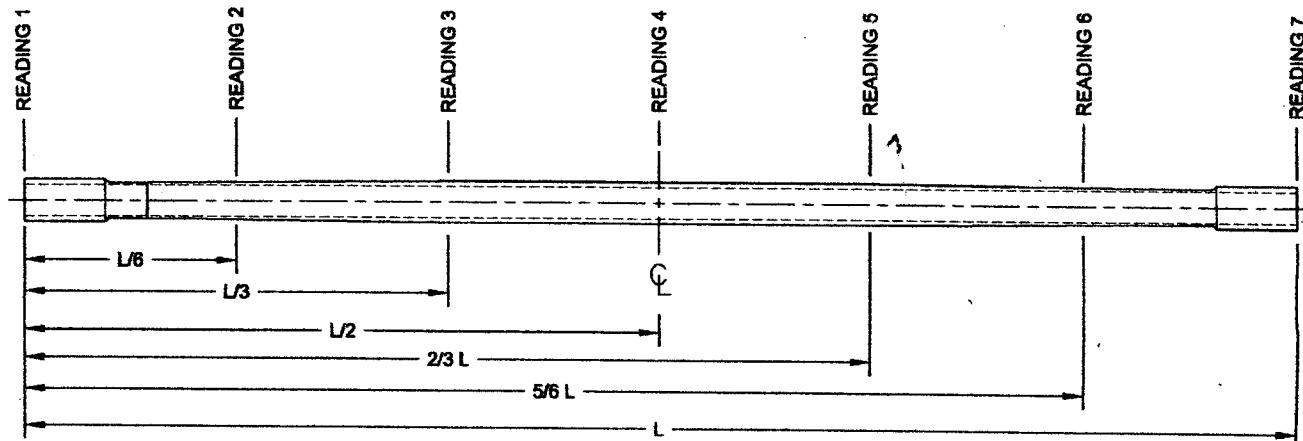
Work Order: 79391

Description:

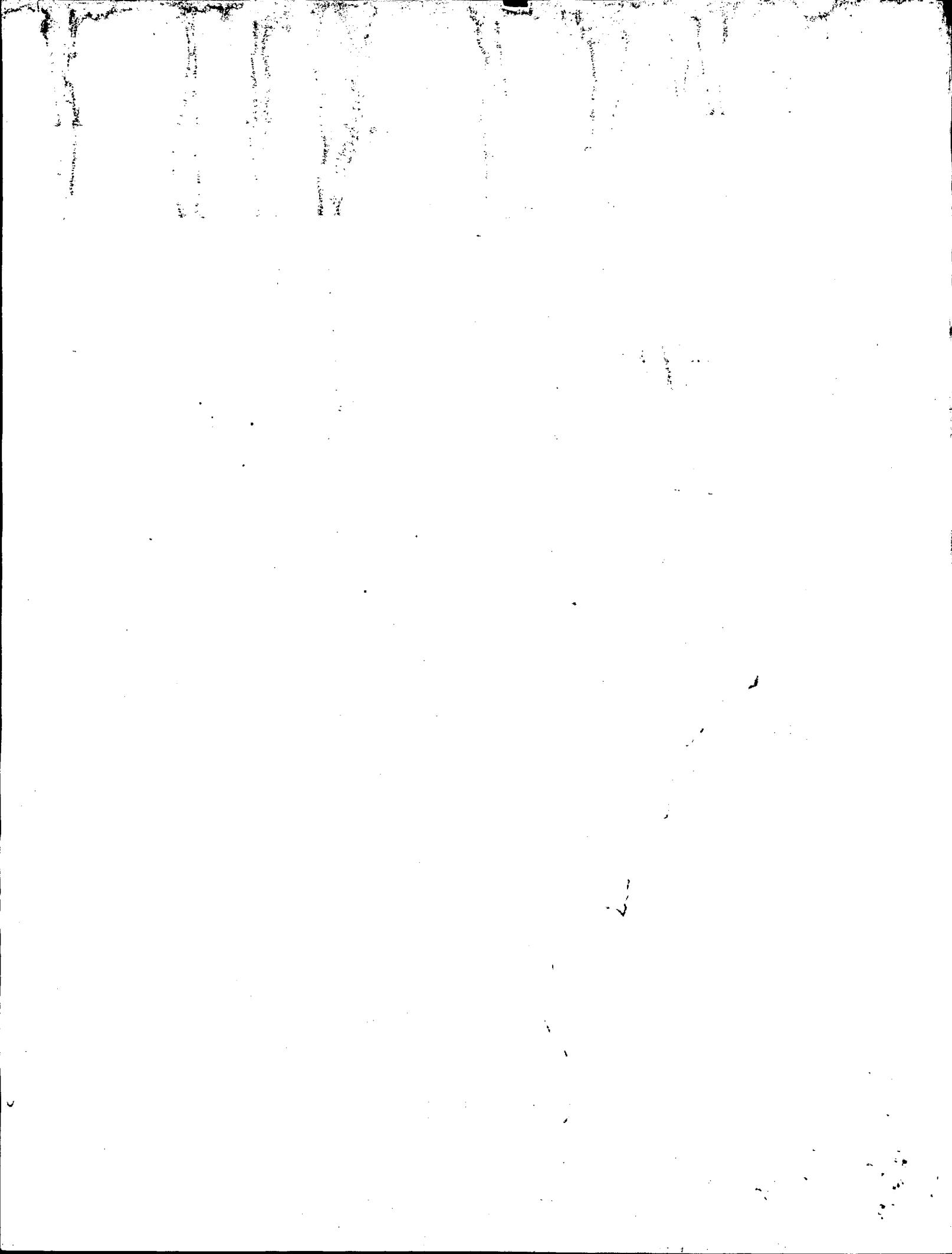
Part Number: D350-748-241 TRN

Inspection Dwg:

Page 1 of 1

WALL THICKNESS MEASUREMENT

	WALL THICKNESS MEASUREMENT (IN)				DEVIATION (max-min)	TOLERANCE
	Q1	Q2	Q3	Q4		
READING 1 L= 0"					0.030"	
READING 2 L= 20	.127	.116	.115	.129		
READING 3 L= 41	.161	.168	.129	.159		
READING 4 L=						
READING 5 L= 20	.133	.124	.115	.128		
READING 6 L= 41	.168	.164	.152	.153		
READING 7 L=						



Item	Qty	Part Number	Description
1	X	D350-748-241	CROSSTUBE ASSEMBLY (AS 350/355 HI AFT)
2	1	D6015-125	CROSSTUBE (OR D6018-125)
3	2	D3502-1	SUPPORT
4	2	D2856-400-710	ABRASION STRIP
5	1	AELS-1032-225	INSERT
6	1	NAS1149D0363J	WASHER (OR AN960JD10)
7	2	MS21920-20	CLAMP (PER DART SPEC. M-MS21920-20)
8	1	MS27039-1-10	SCREW

GENERAL NOTES:

F 1) MATERIAL: MANUFACTURED FROM D6015-125 OR D6018-125
FINISHED LENGTH = 122.700±0.06

2) FINISH: MAGNETIC PARTICLE INSPECT PER DART QSI 038 4.2
CADMIUM PLATE PER AMS-CQ-P-416B, CLASS 1, TYPE II
PRIME INSIDE AND OUTSIDE PER DART QSI 005 4.2
PAINT OUTSIDE PER DART QSI 005 4.2

3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED.

4) UNITS: INCHES UNLESS OTHERWISE NOTED.

5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX

6) IDENTIFICATION: DART PART NUMBER "D350-748-241" AND BATCH NUMBER ON INSIDE OF CUFF
PER DART QSI 044 6.4 (VIBRATING STYLUS)

7) WEIGHT: 29.85 lbs

8) PART IS SYMMETRIC ABOUT CENTERLINE, EXCEPT FOR Ø0.297 HOLE.

9) RUN CUTTER OFF PART WHERE INDICATED. BLEND OUT ALL EDGES FROM MACHINING
LONGITUDINALLY, TRANSITION SHOULD BE SMOOTH. NOTE: ALL HOLES ARE DRILLED AFTER
BENDING.

10) BEND PROGRESSIVELY WITH A MINIMUM OF 7 PASSES. MAXIMUM TUBE FLATTENING DUE TO
BENDING IS 6% BASED ON O.D.

11) HEAT TREAT TO MIN. 180 KSI PER MIL-T-6736 OR AMS 2759-1C AFTER TURNING. ACCEPTABLE TO
VERIFY TENSILE STRENGTH BY HARDNESS TEST PER ASTM E18 TO 40-45 HRC.

12) INSTALL D2856-400-710 ABRASION STRIPS WITH A GAP ON BOTTOM SIDE OF CROSSTUBE,
CENTERED OPPOSITE D3502-1 SUPPORT, PER QSI 035.

13) EXTREME CARE MUST BE TAKEN TO PROTECT THE OUTSIDE SURFACE OF THE TUBE. THE
OUTSIDE SURFACE MUST BE SMOOTH AND FREE FROM SURFACE DEFECTS SUCH AS SCRATCHES,
NICKS, OR DENTS. DEFECTS UP TO 0.005" MAY BE BLENDED OUT LONGITUDINALLY.
CIRCUMFERENTIAL GRIND MARKS ARE UNACCEPTABLE. WHEN DRILLING HOLES EXTREME CARE
MUST BE TAKEN AND CAREFUL DEBURRING PERFORMED TO ENSURE A CLEAN HOLE WITH NO
CRACKING/CHIPPING/GROOVES.

14) TORQUE CLAMPS 60 TO 80 IN-LB. ENSURE AT LEAST 1.5 THREADS SHOWING INSIDE AND THAT
NUT HAS NOT BOTTOMED-OUT AFTER TORQUING.

15) MAX TWIST AFTER BENDING: WITH XTUBE LAYED FLAT ON SURFACE, THE DIFFERENCE BETWEEN
CUFF HEIGHTS FROM THE SURFACE MAY BE NO LARGER THAN 0.25 (ZN C1-3).

79391 M.L.J
12/01/25

RELEASED
2011-01-08

F	ADD HRC TEST OPTION (B8-1) PER PAR 09-040, ADD TWIST LIMIT (A8-1, C1-3), ADD D6015-125 OPTION (C6-1), STOCK DIM NOW MACHINED (D1-4)	CP	10.11.23
E	REVISE GENERAL NOTES; UPDATE TO CURRENT STANDARDS; RELOCATED FLAG #6 PER PAR 08-046 (ZN A8-3); ADD TOLERANCES (ZN C6-3, D2-3)	RF	09.09.30
D	MAG. PARTICLE AND CAD PLATE AS MFD.	CP	06.10.31
C	ADD CAD PLATING	CP	06.08.14
B	ADD D6018-125 & PRIME AND PAINT	CP	06.06.30
A	NEW ISSUE	CP	06.03.31
REV.	DESCRIPTION	BY	DATE
DESIGN	99	DART AEROSPACE LTD	
DRAWN	99	HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. F
MFG. APPR.		D350-748-241	SHEET 1 OF 4
APPROVED		TITLE	SCALE
DE APPR.		CROSSTUBE (AS 350/355 HI AFT)	NTS
DATE	10.11.23	COPRIGHT © 2006 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

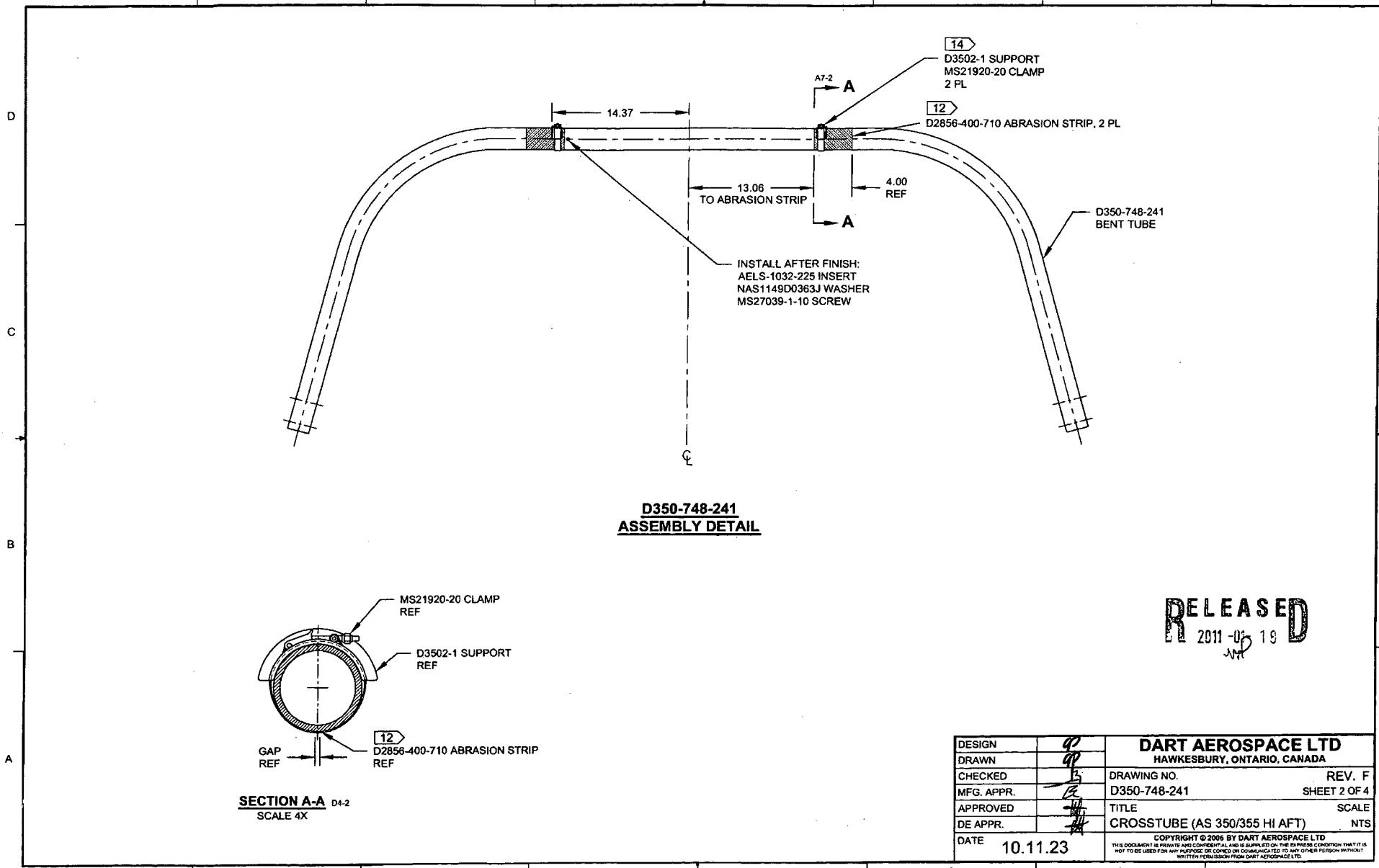
Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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NOTE: Date & initial all entries

79391

8 7 6 5 4 3 2 1



W/O:		WORK ORDER CHANGES					
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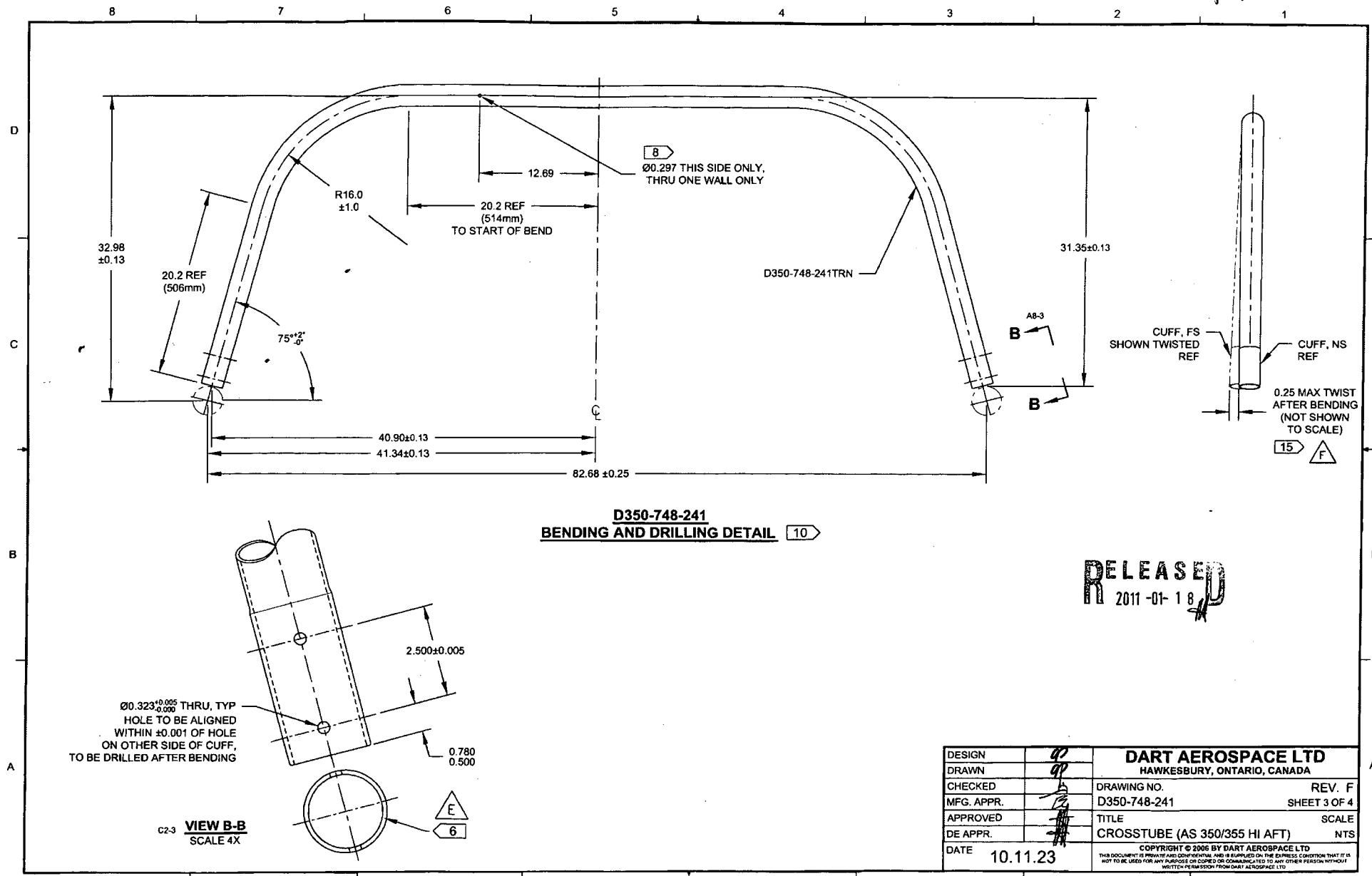
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Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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NOTE: Date & initial all entries

78391



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DATE	STEP	PROCEDURE CHANGE			By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

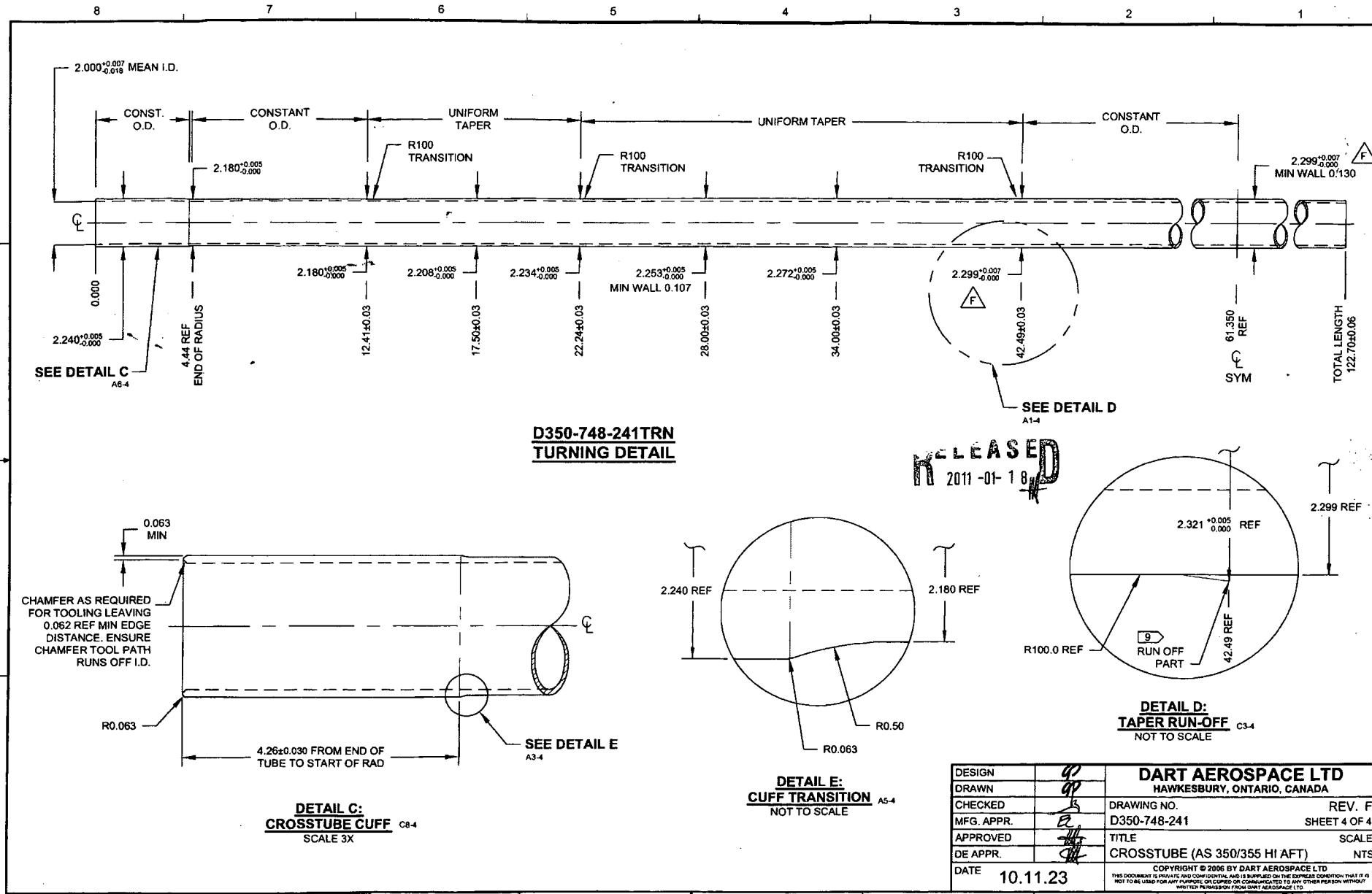
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Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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NOTE: Date & initial all entries

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W/O:		WORK ORDER CHANGES							
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Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date				

NOTE: Date & initial all entries

Packing Li

Sales Order Num

71

Sales Order D

Apr 3, 20

P

METLAB
1000 E. MERMAID LANE
WYNDMOOR, PA 19038

Voice: 215-233-2600
 Fax: 215-233-5653

Sold To:
 DART AEROSPACE
 1270 ABERDEEN STREET
 HAWKESBURY, ON K6A 1K7

Ship To:
 DART AEROSPACE
 1270 ABERDEEN STREET
 HAWKESBURY, ON K6A 1K7

Customer ID	PO Number	Payment Terms
DARA	PQ16600	Net 30 Days
Ship Via		Process
	YRC	

Quantity	Item	Description	Total Shipped	This Shipment
1.00	✓	1 PC. 74672 D-350-748-141TRN CROSSTUBE HEAT TREAT TO MIN 180 KSI (MIL-T-6736OR AMS 2759-IC)		
1.00	✓	1 PC. 74673 D-350-748-141TRN CROSSTUBE HEAT TREAT TO MIN 180 KSI (MIL-T-6736OR AMS 2759-IC)		
1.00	✓	1 PC. 74676 D-350-748-141TRN CROSSTUBE HEAT TREAT TO MIN 180 KSI (MIL-T-6736OR AMS 2759-IC)		
1.00	✓	1 PC. 74678		

COMMENTS

SHIPPED BY SIGNATURE
 METLAB

5/1/12
 DATE

RECEIVED BY, SIGNATURE
 DART AEROSPACE

DATE

Packing L

Sales Order Num

71

Sales Order I

Apr 3, 2

F

METLAB
1000 E. MERMAID LANE
WYNDMOOR, PA 19038

Voice: 215-233-2600
Fax: 215-233-5653

Sold To:
DART AEROSPACE
1270 ABERDEEN STREET
HAWKESBURY, ON K6A 1K7

Ship To:
DART AEROSPACE
1270 ABERDEEN STREET
HAWKESBURY, ON K6A 1K7

Customer ID	PO Number	Payment Terms
DARA	PO16600	Net 30 Days
	Ship Via YRC	Process

Quantity	Item	Description	Total Shipped	This Shipment
1.00		D-350-748-141TRN CROSSTUBE HEAT TREAT TO MIN 180 KSI (MIL-T-6736OR AMS 2759-IC) 1 PC. 74712		
1.00		D-350-748-141TRN CROSSTUBE HEAT TREAT TO MIN 180 KSI (MIL-T-6736OR AMS 2759-IC) 1 PC. 74718		
1.00		D-350-748-141TRN CROSSTUBE HEAT TREAT TO MIN 180 KSI (MIL-T-6736OR AMS 2759-IC) 1 PC. 79010		
		D-350-748-141TRN CROSSTUBE		

COMMENTS

SHIPPED BY, SIGNATURE
METLAB

5/1/12
DATE

RECEIVED BY, SIGNATURE
DART AEROSPACE

DATE

Packing L

Sales Order Num:

71

Sales Order D

Apr 3, 2

P:

METLAB
1000 E. MERMAID LANE
WYNDMOOR, PA 19038

Voice: 215-233-2600
 Fax: 215-233-5653

Sold To:
 DART AEROSPACE
 1270 ABERDEEN STREET
 HAWKESBURY, ON K6A 1K7

Ship To:
 DART AEROSPACE
 1270 ABERDEEN STREET
 HAWKESBURY, ON K6A 1K7

Customer ID	PO Number	Payment Terms
DARA	PO16600	Net 30 Days
Ship Via		Process
	YRC	

Quantity	Item	Description	Total Shipped	This Shipment
1.00	✓	HEAT TREAT TO MIN 180 KSI (MIL-T-6736OR AMS 2759-IC) 1 PC. 79011 D-350-748-141TRN CROSSTUBE		
1.00	✓	HEAT TREAT TO MIN 180 KSI (MIL-T-6736OR AMS 2759-IC) 1 PC. 79013 D-350-748-141TRN CROSSTUBE		
1.00	✓	HEAT TREAT TO MIN 180 KSI (MIL-T-6736OR AMS 2759-IC) 1 PC. 73372 D-350-748-141TRN CROSSTUBE HEAT TREAT TO MIN 180 KSI (MIL-T-6736OR AMS 2759-IC)		

COMMENTS

SHIPPED BY, SIGNATURE
 METLAB

5/1/12
 DATE

RECEIVED BY, SIGNATURE
 DART AEROSPACE

DATE

Packing L

Sales Order Num

: 71

Sales Order I

Apr 3, 2

F

METLAB
1000 E. MERMAID LANE
WYNDMOOR, PA 19038

Voice: 215-233-2600
Fax: 215-233-5653

Sold To:
DART AEROSPACE
1270 ABERDEEN STREET
HAWKESBURY, ON K6A 1K7

Ship To:
DART AEROSPACE
1270 ABERDEEN STREET
HAWKESBURY, ON K6A 1K7

Customer ID	PO Number	Payment Terms
DARA	PO16600	Net 30 Days
	Ship Via	Process
	YRC	

Quantity	Item	Description	Total Shipped	This Shipp.
1.00	1	1 PC. 73375 D-350-748-141TRN CROSSTUBE HEAT TREAT TO MIN 180 KSI (MIL-T-6736OR AMS 2759-IC)		
1.00	2	1 PC. 79391 D-350-748-141TRN CROSSTUBE HEAT TREAT TO MIN 180 KSI (MIL-T-6736OR AMS 2759-IC)		
1.00	3	1 PC. 79392 D-350-748-141TRN CROSSTUBE HEAT TREAT TO MIN 180 KSI (MIL-T-6736OR AMS 2759-IC)		
1.00	4	1 PC. 79393		

COMMENTS

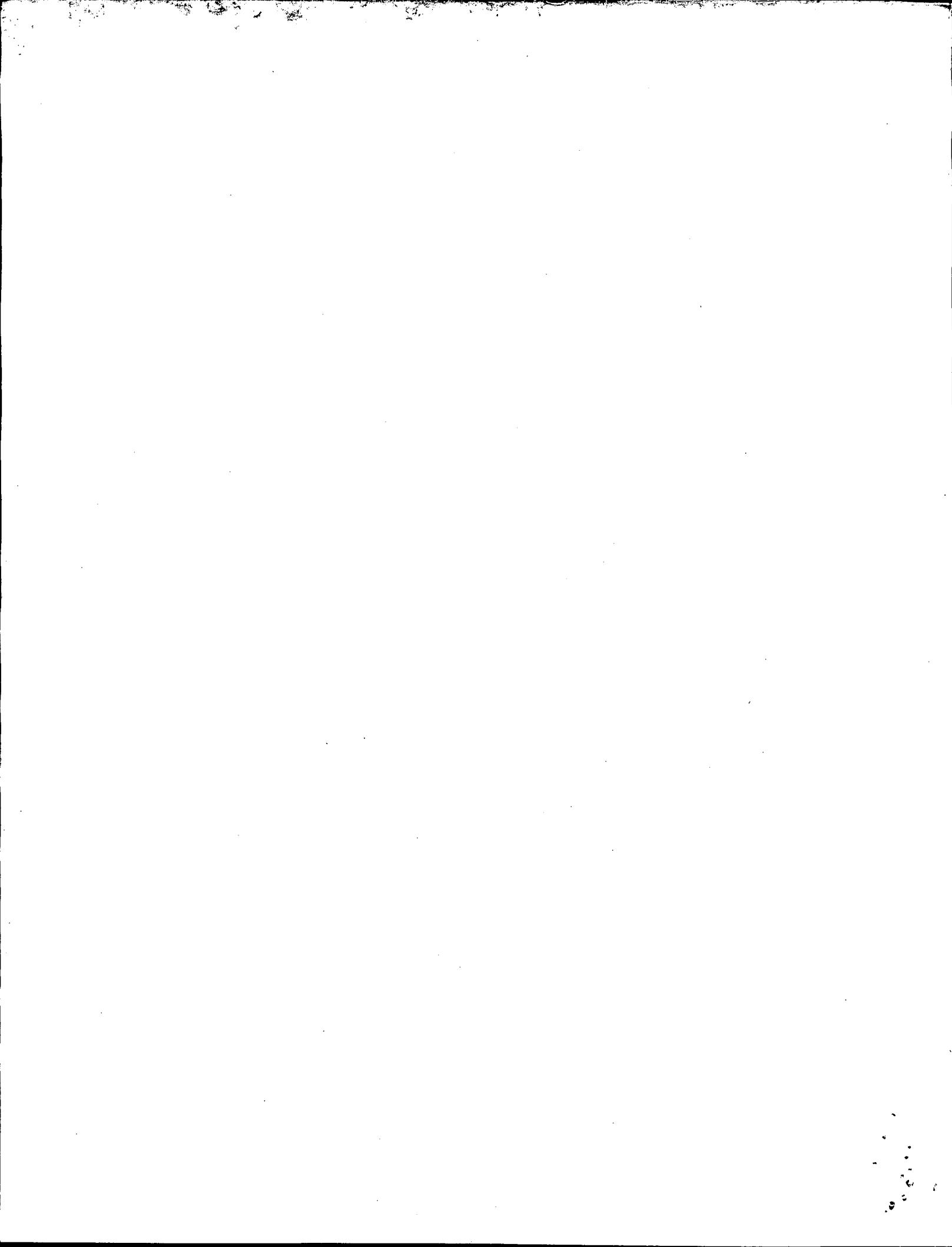
SHIPPED BY, SIGNATURE
METLAB

5/1/12

DATE

RECEIVED BY, SIGNATURE
DART AEROSPACE

DATE



Packing L

Sales Order Num

71

Sales Order I

Apr 3, 2

F

METLAB
1000 E. MERMAID LANE
WYNDMOOR, PA 19038

Voice: 215-233-2600
 Fax: 215-233-5653

Sold To:
 DART AEROSPACE
 1270 ABERDEEN STREET
 HAWKESBURY, ON K6A 1K7

Ship To:
 DART AEROSPACE
 1270 ABERDEEN STREET
 HAWKESBURY, ON K6A 1K7

Customer ID	PO Number	Payment Terms
DARA	PO16600	Net 30 Days
Ship Via	Process	
	YRC	

Quantity	Item	Description	Total Shipped	This Shipment
		D-350-748-141TRN CROSSTUBE HEAT TREAT TO MIN 180 KSI (MIL-T-6736OR AMS 2759-IC) 560 POUNDS TOTAL		

COMMENTS


 SHIPPED BY, SIGNATURE
 METLAB

5/1/12
 DATE

RECEIVED BY, SIGNATURE
 DART AEROSPACE

DATE



Certification

SOLD TO

Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7

May 1, 2012

Metlab Shop Order No: 71785
Purchase Order: 16600
Description: Crosstube
Part No.: D350-748-141TRN
Quantity: 14 Pieces
Weight: 560 Pounds
Material: 4130 Alloy Steel
Specifications: Heat Treat to Minimum 180 KSI (MIL-T-6736OR AMS 2759-IC)

This is to certify that the above parts were processed as indicated above and conform to the specification requirements.

Results:

HRC 40 (182 KSI Tensile Strength)

5/1/2012

METLAB
Quality Representative Mark Podob

MERCURY CONTAMINATION: During the heat treating process, testing and inspections, the product did not come in direct contact with mercury or any of its compounds nor with any mercury containing device.



Heat Treating and Metallurgical Consulting



D350 X-TUBE CUFF MEASURMENTS

TYPE	BATCH #	SIDE A	SIDE B
		TWO READINGS	TWO READINGS
AFT	B79393	2.221"/2.251"	2.227"/2.252"
AFT	B79391	2.251"/2.241"	2.236"/2.252"
AFT	B79392	2.238"/2.248"	2.220"/2.262"
AFT	B73372	2.243"/2.247"	2.223"/2.263"
AFT	B73375	2.245"/2.250"	2.236"/2.266"
FWD	B79010	2.230"/2.252"	2.235"/2.245"
FWD	B79011	2.200"/2.280"	2.248"/2.249"
FWD	B74718	2.208"/2.289"	2.242"/2.252"
FWD	B74673	2.189"/2.298"	2.247"/2.238"
FWD	B74678	2.240"/2.258"	2.262"/2.236"
FWD	B74672	2.253"/2.266"	2.260"/2.253"
FWD	B74712	2.264"/2.251"	2.255"/2.258"
FWD	B74676	2.229"/2.263"	2.239"/2.254"
FWD	B79013	2.249"/2.2236"	2.243"/2.245"

Notes: tubes are NOT sandblasted and are still a little crooked

8/26/08

